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Master's Thesis of Public Administration

# Hyper-connectivity and the Future of Work

- Implications for the Labor Market Reform in  
South Korea -

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# **ABSTRACT**

## **Hyper-connectivity and the Future of Work:**

### **Implications for the Labor Market Reform in South Korea**

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Hyper-connectivity is one of the most remarkable phenomena in the 21st century which is accelerated by two mega trends, technology and globalization. Hyper-connectivity means an extraordinarily high level of connection or the state of beyond connection by means of digital technology. Hyper-connectivity has transformed the way in which people work and the fundamental structure of the labor market as well. It performs not just as a hardware technology, but also as an infrastructure that can strengthen the individual's ability, potential, and bargaining power in the labor market. Based on in-depth interviews with freelancers and experts, this study discovered how hyper-connectivity in the labor market would empower workers, especially those who do not belong to organizations for two aspects. First is a 'web-based job platform' which could augment an individual's capability. The second one is a 'web-based marketplace' in which individual workers could sell their products, services, skills, or know-how to the world market beyond the temporal and spatial boundaries.

Also, this study demonstrates the possibility that a technological change could be a solution to get successful labor market reform in South Korea. This study particularly focuses on the dual labor market. South Korea's labor market is distinctly divided into two sectors: one is a primary labor market and the other is a

secondary labor market. The gap between the two sectors is large enough to pose problems such as inequality, social conflict, and inefficiency. The South Korean government implemented a variety of policies to address the problem, such as the enactment of Act on the Protection of Fixed-Term and Part-Time Workers (also known as “Non-Regular Worker Act”) in 2007 and has encouraged the business community to convert their non-regular employees into regular ones. However, such efforts have failed to make any differences. By many standards, the gap has become even wider. Through hyper-connected technological support, non-regular workers such as freelancers and independent contractors are likely to extend their career capabilities and also likely to enlarge their marketplaces. And these mechanisms could lead to the increase in income, expertise in career, and job satisfaction among non-regular workers. This study points out that technological change could be a catalyst for successful labor market reform rather than the government's intentional intervention into the labor market.

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**Keywords:** Hyper-connectivity, extension of individual capability, extension of marketplace, future of work, dual labor market

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# **1. Introduction**

## **1.1 Purpose of Study**

The purpose of this study is to find out how digital technology would change the way in which we work in the near future. This study focuses particularly on the new technological phenomenon in the 21st century, 'hyper-connectivity'. Hyper-connectivity is a phenomenon which means an extraordinarily high level of connection or the state of beyond connection by means of the digital technology. This study attempts to answer the following questions: what hyper-connectivity is and how hyper-connectivity of technology is changing the way in which we work; in what way it transforms the structure of labor market; how such change could extend an individual's capability; how such change give individual workers or small businesses a much bigger marketplace; how hyper-connectivity affected the job opportunities, incomes, job satisfactions, and development of expertise of non-regular workers, especially independent workers such as freelancers; and furthermore, if such change could become one of the catalysts that will alleviate the problem of dual-structure that persists in the South Korean labor market.

## **1.2 Structure of Study**

In the next chapter, this study commences with a basic concept of hyper-connectivity and the meaning of it in the labor market. Although hyper-connectivity is a kind of network, hyper-connectivity takes a few different characteristics from traditional networks due to its enormous complexity. Chapter 2 will illustrate main characteristics of the hyper-connected network and distinctive differences from traditional networks based on the complex network theory. Also, this study will demonstrate the meaning of hyper-connectivity in terms of labor issue, especially workers who do not belong to a traditional organization with

several theories such as transaction cost theory, the extension of Man, and long-tail theory.

In Chapter 3, this study will focus on networks (communication technologies) as leverages by which people, particularly individuals or small groups, could extend their potential capabilities for two aspects: First, networks could extend a human's potential. Second, networks could extend the marketplace in which individuals or small businesses could make a living with their own specific skills, techniques, services, and even know-how. In order to find out these two aspects that are accelerated by hyper-connectivity, qualitative and open-ended interviews from twenty relevant interviewees were used as the main method in Chapter 3. These interviewees consisted of eleven freelancers from six countries and nine relevant experts from private and public sectors.

The 4th Chapter, this study deals with the changing labor market in the United States, particularly in terms of hyper-connectivity. In addition to the positive aspects of hyper-connectivity for the future labor market, this research also deals with a few drawbacks of the hyper-connected workforce. Subsequently, this research demonstrates implications that could explain the possibility of narrowing the gap between primary and secondary sectors from the in-depth interviews of freelancers and experts and also a relevant survey outcome. Lastly, this study proposes several policy implications that the government of South Korea could refer to under the rapidly changing labor market: how it should change its approach to the labor market reform; what kinds of policies would be needed under the hyper-connected labor market.

### **1.3 Background: Labor Market of South Korea**

South Korea has achieved extraordinary economic growth. Korea has been one of the fastest growing OECD economies over the past 25 years (OECD, 2016). However, Korea has lagged behind when it comes to a labor issue. According to

the World Economic Forum, the overall competitiveness of South Korea ranks 26th out of 144 countries in 2014. However, the rank of the efficiency of the labor market is 86th out of 148 countries, which dropped eight levels compared to 2013 (Schwab, 2014). There are many reasons for falling behind of labor market on a global scale. One of the most significant reasons for backwardness boils down to the structure of the labor market. The labor market of South Korea is strictly divided into two sectors; one is a primary labor market and the other is a secondary labor market. This is called 'dual labor market' or 'labor market dualism.' There are big differences between the primary and secondary labor markets in terms of income, fringe benefits, and many kinds of social insurances. It is often called a 'winner-take-all' system because most of the advantages are slanted into just a regular worker group. According to the Ministry of Employment and Labor, the average income of a non-regular worker takes up just 47 percent of that of a regular worker.

**[Table.1-1] Gap between Primary and Secondary Labor Market**

	<b>Average Monthly wage</b>	<b>Average Hourly wage</b>	<b>Average Work period</b>	<b>National Pension rate</b>
<b>Primary sector (Regular worker group)</b>	2.8 Mil won	13,800 won	8.9 years	96.3%
<b>Secondary sector (Non-regular group)</b>	1.4 Mil won	7,400 won	2.5 years	55.2%

\* Source: Statistic Korea, economic activity census (August 2010)

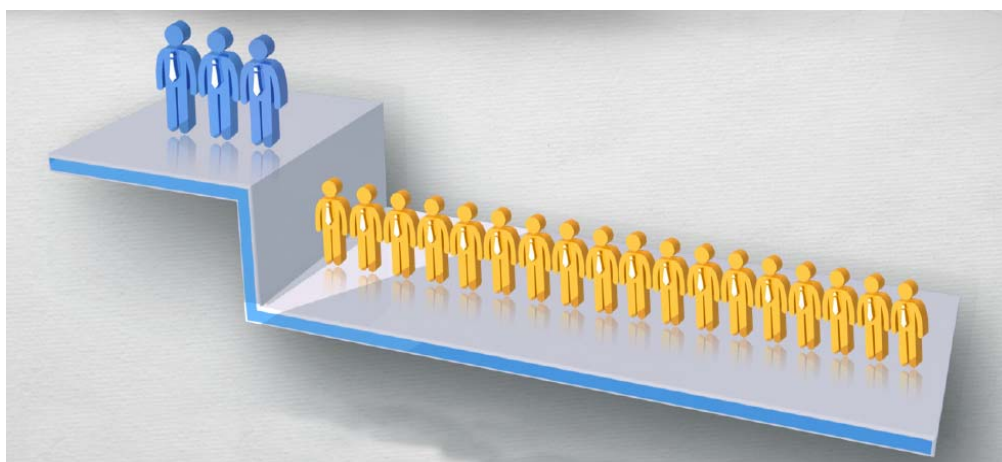
This gap becomes wider if retirement allowance, extra pay for overtime work, special bonuses, and social insurances are included. In addition these official benefits, regular workers enjoy much higher job protection thanks to labor laws, court decisions, business practices, social customs and a labor union (SaKong & Koh, 2010). This trend seems unflinching.

**[Table.1-2] Subscription Rate of Social Insurances of Regular and Non-regular Worker (%)**

	Unemployment insurance	Health insurance	National pension	Occupational health & safety insurance
<b>Regular worker</b>	95.4	97.9	87.8	98.0
<b>Non-regular worker</b>	66.7	55.5	52.7	96.4

(Source: Ministry of employment and labor, April 2016)

**[Figure.1-1] Concept Picture of the Dual Labor Market in South Korea (Source: SBS)**



A strictly divided labor market has had negative impacts on South Korea. First of all, a significant discrepancy between regular and non-regular workers is the primary cause of inequality and relative poverty (OECD, 2016). Secondly, the segmentation of the labor market has a negative impact on the distribution of the human resources. The OECD also views the dual labor market as one of the most serious problems in South Korea. The OECD recommends that South Korea take rapid measures to break down labor market duality in order to boost productivity

and growth (2015).

The government implemented a myriad of policy efforts in order to narrow the gap between the primary and the secondary labor market. The government has encouraged companies to transition their non-regular workers into regular employees as soon as possible. Also, the government put into effect in 2007 a law that strictly prohibits employers from discriminating non-regular workers. Despite these policy efforts made by the government, the gap between the two groups has grown even wider (안주엽, 2012).

It is time to approach this issue from a different point of view. Rapidly changing communication technologies can change the fundamental economic base and a fundamental shift in an economic base could alter the structure of labor. This result could solve the structural labor problem. Under these rapidly evolving circumstances, it is meaningful to find out how our economic and labor structure has changed and how these changes could solve structural problems and overcome problems regarding inefficiencies. Moreover, how these changes could make a breakthrough for labor market reform in South Korea.

## 2. The Age of Hyper-connectivity

### 2.1 Concept of Hyper-connectivity

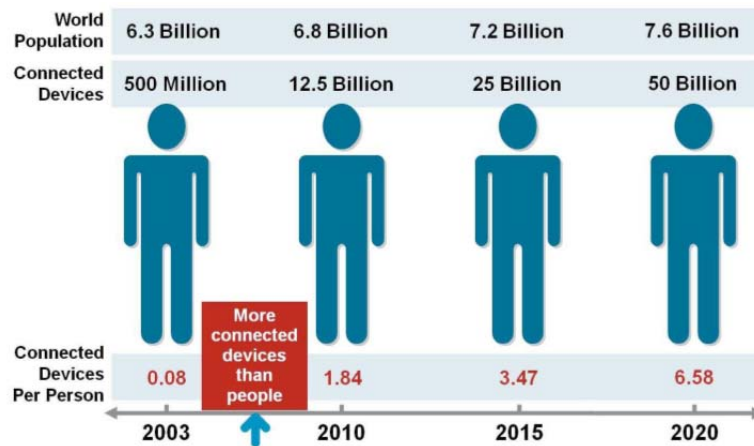
The definition of hyper-connectivity is an extraordinarily high level of connection or the state of beyond connection itself. It also means the world where people could control material and virtual resources on a real-time basis beyond time and space limitation. Hyper-connectivity is a phenomenon that appears when the connections between people increase drastically by digitalization through computers, the Internet, and mobile phones since the mid-20th century(유영성, 2014).

The concept of hyper-connectivity was first proposed by Canadian sociologists Anabel Quan-Haase and Barry Wellman in 2001. The early concept of hyper-connectivity is based on the network society in which people could communicate using various methods, such as email, messenger, mobile phones, and face-to-face contacts(Wellman, 2001). The concept of hyper-connectivity evolved into the availability of people to communicate anywhere and anytime(Quan-Haase & Wellman, 2005). The idea of hyper-connectivity has come to fruition faster than expected thanks to the rapid development of Internet technology, smart devices, and social network services. Regarding Internet access, the number of fixed-broadband subscriptions reached a total of 711 million globally in 2014<sup>1</sup>. The number of connections is even bigger if we include the number of the Internet of Things (IoT). According to Intel, there will be 200 billion smart devices will be in use by 2020, compared with 2 billion in 2006 and 15 billion today.

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<sup>1</sup> It is equivalent to a 10 percent of world population, compared with 220 million subscriptions and a 3.4 percent of world population in 2005(Hajkowicz et al., 2016).

**[Figure.2-1] Hyper-connected Society, and Ratio between a number of Network Devices with a number of Global Population**



\* Source: CISCO, 2011

Dave Evans, Cisco's Chief Futurist and Chief Technology Officer, is a person who identified the concept of hyper-connectivity more clearly in the real world. He emphasized that a critical point regarding hyper-connectivity is somewhere between 2008 and 2009 because the number of things connected in the world exceeded the number of global population during that period. He illustrated that we are on the move toward the era of hyper-connectivity. Evans predicted that the future Internet will connect everything on earth, such as people, things, spaces, and systems as one network (Evans, 2011).

Thomas Friedman wrote a column in the New York Times in 2012 regarding the hyper-connectivity. In a column 'The robot and you', he illustrated that the progress of Information Technology had made a connection to networks beyond the limitation of physical cut off. In particular, he made an emphasis of TGIF (Twitter, Google, I-phone, Facebook) by which social connection is strengthened even more. The term 'hyper-connectivity' refers not only to numerous means of communication and interaction, but also to its impact on both personal and organizational behavior (Fredette, Marom, Steiner, & Witters, 2012). Fredette illustrated the key

attributes of hyper-connectivity in his research as follows.

**[Table.2-1] Key Attributes of Hyper-connectivity**

Key attributes	Detailed characteristics
<b>Always on</b>	Broadband and ubiquitous mobile device enable people to be connected to family, work, friends, avocations, obsessions, and more 24/7
<b>Readily accessible</b>	A universe of mobile devices and personal computers links people and organizations together; these connections are increasingly available at any time and in any location.
<b>Information rich</b>	Websites, search engines, social media, and 24-hour news and entertainment channels ensure that information-from the strategic to the banal- is always on hand, beyond anyone's capacity to consume.
<b>Interactive</b>	Hyper-connectivity ensures that everyone can offer input on just about everything.
<b>Not just about people</b>	Hyper-connectivity includes people-to-machine and machine-to-machine communications, supporting the development of what has been termed the Internet of Things.
<b>Always recording</b>	Service records, virtually unlimited storage capacities, miniaturized video cameras, global positioning systems, sensors, and more combined with people's desire to document their own activities-ensure that a large portion of everyone's daily activities and communications are part of a semi-permanent record.

\* Source: (Fredette et al., 2012)



## **2.2 Theoretical Framework**

This section will deal with theoretical backgrounds of hyper-connectivity. Hyper-connectivity is one of the most remarkable phenomena in the 21st century. It has been accelerated by two mega trends, technology and globalization. Although it is a new type of phenomenon that has never been experienced, hyper-connectivity is categorized as a kind of network. A network is a set of actors or nodes along with a set of ties of a specified type that link them (Borgatti & Halgin, 2011). According to this definition of network, hyper-connectivity is a network that has much more actors or nodes along with a set of ties beyond its temporal and spatial limitation than existing networks. Unlike traditional networks, actors or nodes are not just people or groups of people but also could be objects such as web servers, platforms, big data, and programming source codes.

Admittedly, hyper-connectivity would have several common characteristics that traditional networks or organizations have. However, hyper-connectivity is likely to have significantly different characteristics compared to traditional networks due to its enormous complexity. In this section, this study will illustrate the key features of the hyper-connected network and the distinctive differences it has from traditional networks based on the complex network theory. Also, this study will demonstrate the meaning of hyper-connectivity regarding labor, especially independent workers who do not belong to a traditional organization with several theories such as transaction cost theory, the extension of Man, and long-tail theory.

### **2.2.1 Complex Network Theory**

There has been significant research on networks in several countries for a long time. Basically, network theory refers to the mechanisms and processes that interact with network structures to yield certain outcomes for individuals and

groups(Borgatti & Halgin, 2011). Many network theorists regard its location as the most important factor in the network. From the traditional point of view, actors' power and influence stem from their centrality within a network(Ronfeldt & Arquilla, 2001). In other words, if actors are located in the center of a network and if actors succeed in entering into the hub of that network, they are likely to have more information, resources, power, and influence toward other actors or nodes. Traditional networks usually have hierarchical structures in which there are a few core actors at the center with others around the peripheries of their hubs. Generally, they have vertical structures where power, resources, and information are concentrated on a few core actors. Each network is generally stable because it is separated from other networks.

There have been emerging new networks with advancements in technology. A complex network is one of the most remarkable types of network in the hyper-connected society. Unlike the vertical structure of traditional networks, complex networks do not have a hierarchical structure. The structures and sizes of complex networks could be adjustable like Lego blocs according to their environments. Actors or nodes of complex networks could move independently with their autonomies like living organisms such as amoebas while actors in traditional networks are likely to be tightly interdependent with each other within their each network(김상배, 2008). Manuel Castells, a prominent network theorist, explained the main characteristics of modern networks as flexible, scalable, and survivable(Castells, 2004). Eric Raymond, a software developer, explained the concept of complex networks as a bazaar, free marketplace(Raymond, 2001). The bazaar style is a way of producing knowledge goods and services such as software and design without a main corporation which acts as a hub in networks. Instead, there are a lot of independent actors who produce knowledge goods and service while they move and transact freely without a specific hub. That is why he called this model as a bazaar, free marketplace.

One reason we should focus on the rise of complex networks is that they have

enough potential to shift power from traditional hierarchical networks and organizations to small networks or even to individuals(김상배, 2008). In the past, hierarchical networks and organizations usually enjoyed their monopoly status regarding information, resources, and power in the market. However in complex networks, small organizations or even individuals who are not located in the center of a traditional network could have more access to more information, resources, and power with the help of technology, especially, hyper-connectivity. Although the concept of complex networks could be applied to many kinds of fields in a modern society, this study will narrow it down to the labor market.

**[Table.2-2] Comparison between Traditional and Complex Networks**

	<b>Traditional Networks</b>	<b>Complex Networks</b>
<b>Basic Structure</b>	Vertical, Hierarchical	Horizontal, Democratic
<b>Hub</b>	One or small numbers of hubs within a network	Changing multi-hubs between networks
<b>Power</b>	Concentrated Power	Distributed Power
<b>Characteristic</b>	Stable	Dynamic
<b>Range</b>	Local	Global

## 2.2.2 Transaction Cost Theory

There are a variety of definitions of transaction costs. For a narrow meaning, a transaction cost is defined as the expense of exchanging goods and services(Demsetz, 1968). For a broader sense, it is defined as a cost of organizing and participating in a market(Vogelsang & Gordon, 1996). Search and information costs, bargaining costs, policing and enforcement costs are the main categories of a transaction cost. Originally, transaction cost theory come out as an attempt by economists in order to justify the existence of organizations(Greenwald, 2008).

Economists tried to prove that organizations have the ability to reduce the costs of individual-to-individual economic relations. According to this perspective, organizations are likely to be more efficient and advantageous than individuals who do not belong to organizations in the market because they could have outstanding cost advantages.

However, complex networks which are accelerated by hyper-connectivity could change this long lasting economic logic. Complex networks are not necessarily traditional organizations. However, individuals who are not employed by organizations could take advantage of reducing expenses of exchanging goods and services and organizing and participating in a market by using the complex networks which are accelerated by the hyper-connected technology. Tapscott and Williams argued that the World Wide Web has a vast ability to reduce the transaction costs and collaborative working costs of economic activity. As a result, there are numerous economic transactions beyond the boundaries of companies that were usually operated just within the boundaries of organizations(Tapscott & Williams, 2010).

### **2.2.3 Extension of Human**

In addition to the advantages of reducing transaction costs even as individuals, there are a few more crucial aspects in hyper-connectivity. Previous research usually regarded networks as a kind of simple functional tool. They generally focused on the reduction of transaction costs and the increase in the level of information. Admittedly, it is a valid and crucial aspect of networks. However, this study will take one step further. First, networks could extend a human's ability to not only find employment but also excel at it. Second, networks could extend the marketplace in which individuals or small business could make a living with their own very specific skills, techniques, services, or know-how. With these two aspects of networks, workers who do not belong to organizations could develop their

expertise. The end result is better income and improved working conditions for workers in the labor market.

As a first framework, this research takes the perspective of Marshall McLuhan, a prominent media theorist. He argued that communication technology is not just media but also an extension of Man in his well-known book 'Understanding Media: The Extension of Man'(McLuhan, 1964). He elaborated this concept with easy examples: Clothes are the extension of skins. Radio is the extension of the ears. An electric circuit is the extension of central nerves. In other words, it could be said that people could overcome fundamental restrictions such as time and space limitation with the help of networks or communication technologies.

With this approach, we could develop existing network theories one step further regarding labor issues. Johns and Gratton take a similar perspective to a network. They elaborated that communication technologies allowed people to expand their networks far beyond geographic locations and gave them access to new possibilities for work(Johns & Gratton, 2013).

## **2.2.4 Long-tail Theory**

The second theoretical framework this study takes is the 'Long-Tail' concept. The long-tail concept is mainly used in the business field. The name of 'long-tail' was coined by Chris Anderson, author and entrepreneur, in 2004. Anderson expected that the landscape of the market would be entirely different in the digitalized business environment. The long-tail concept is distinct from the traditional business revenue model 'Pareto principle' which elaborates that the top 20% of items such as bestsellers and blockbusters made almost 80% of the revenue.

Contrary to the Pareto principle, Anderson explained the concept of long-tail as such "products that are low demand or have low sales volume can collectively make up a market share that rivals or exceeds the relatively few current bestsellers and blockbusters, but only if the store or distribution channel is large

enough."(Anderson, 2007) Digitalized goods such as online music, movies, and TV series are usually applied to the long-tail concept. One of the most important required conditions for the long-tail theory is a large enough distribution channel. Under the hyper-connected environment, small business and even individuals could meet this required condition.

This concept could be applied to the hyper-connected labor market. Individuals who are not employed by organizations could sell their tangible goods or intangible services through the much-extended market. What is the more important point is that they could focus on what they really do well because there is much more need for unique and specific goods and talents in the broader global market which is facilitated by hyper-connectivity.

## **2.3 Method and Data**

The main method of this research is a qualitative and open-ended interview with freelancers and experts who are working in the labor and technology fields. One of the most important aspects of the interview is that it could provide in-depth information on interviewees' experiences and viewpoints of a particular topic. In many cases, interviews are coupled with other forms of data collection in order to substantiate the researcher's findings or arguments (Turner III, 2010). Also, this research uses follow-up questions in order to keep focusing on the purpose of this study. Creswell and Clark (2007) says that interviewees will not necessarily answer the question being asked by the researcher, so they believe that the researcher should design questions in such a way to make participants focus on their responses to the questions(Creswell & Clark, 2007).

The main subject of this research is freelancers who do their jobs based on the hyper-connected platforms or marketplaces. This research conducted qualitative and open-ended interviews with eleven freelancers from six countries. Their jobs are different from each other. However, their way of working is similar to each

other in that they all have made the most use of the Internet connection when they do their jobs. They usually search and get their jobs through web-based job platforms such as LinkedIn, UpWork, or Freelancer.com.

Also, they often make the best use of the Internet connection when they promote, sell, and distribute their goods, services, or knowledge-based works as much as possible. This research tries to figure out some changes that freelancers have experienced before and after using the hyper-connected job platforms or marketplaces regarding income level, the predictability of monthly income, expertise in career, job satisfaction, and anxiety about the future.

**[Table.2-3] List of the Freelancer Interviewees**

Freelancer	Nationality	Total work experience (Freelancer's period) / years	Job	Others
<b>Masaharu Hayataki</b>	Japan	6.5 (1.5)	Translator, Marketer, PR	
<b>Geoffrey Ballard</b>	U.S.	3 (3)	Software engineer	
<b>Jai Al-Attas</b>	Australia	16 (15)	Start-up founder	
<b>Mar Fandos</b>	Argentina	2.5 (1.5)	Illustrator	
<b>Muhammad Fasieh</b>	Pakistan	6 (2)	Co-founder	
<b>Colton Pomeroy</b>	U.S.	3 (2)	Writer & Web-designer	
<b>Ki suk Lee</b>	Korea	16 (9)	Web publisher	
<b>Seungmi Lee</b>	Korea	8 (4)	Web designer	
<b>Jin Ah Chon</b>	Korea	12 (2)	Web publisher	
<b>Jihyun Bae</b>	Korea	16 (12)	Web designer	
<b>Sehyun Song</b>	Korea	10 (5)	Web designer	

In addition to eleven freelancers, nine experts provided their thoughts and ideas about the new way of working in terms of technology through in-depth expert interviews.

**[Table.2-4] List of the Expert Interviewees**

Name	Organization	Job position	Others
<b>Hyunhee Ahn</b>	Job Korea	Head hunter	
<b>Woojin Park</b>	Elancer	CEO	
<b>Sebastian Siseles</b>	Freelancer.com	Director of International affair	
<b>Ev Boyle</b>	USC Annenberg Center on Communication Leadership & Policy	Director of special projects	
<b>Jeff McQuillan</b>	ESLpod.com	Founder	
<b>Alexander J. Selicha</b>	U.S Department of Labor	Investigator	
<b>Alec Levenson</b>	Center for Effective Organizations at the Marshall School of Business at USC	Senior research scientist	
<b>Steve King</b>	Emergent Research Institute	Partner	
<b>Avetis Antaplyan</b>	Hireclout	Co-founder	
<b>Kiu-Sik Bae</b>	Korea Labor Institute	Senior researcher	

Along with the data from these two group interviews, a survey conducted by a non-profit organization for freelancers, Freelancers Union<sup>2</sup>, is used as

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<sup>2</sup> Freelancers Union is a non-profit organization for freelancers in the United States of America. Membership in Freelancers Union is more than 270,000 nationwide, with more than half in New York State. Freelancers Union argues that all workers should have the freedom to build meaningful, connected, and



important quantitative data in order to back up the findings.

**[Table.2-5] The Outline of the Freelancers Union's Survey**

- Title: Freelancing in America, 2015
- Principal agents: Freelancers Union & Upwork
- Research agent: Independent research firm Edelman Berland
- Survey period: July 30~August 14, 2015
- Respondents: 7,107 U.S. adults who have done paid work in the past 12 months,  
2,429 are freelancers out of all respondents
- Method: On-line survey
- Margin of error:  $\pm 1.16\%$  at the 95% level of confidence

Through these interviews of two groups and the survey result, this research attempts to find out how the hyper-connectivity changes the way they work, how the hyper-connectivity extends the individual's capability, how the hyper-connectivity makes markets much bigger for individuals or small businesses, and how the hyper-connectivity changes workers' working conditions such as income, income predictability, job satisfaction, and anxiety about the future. Especially, this research attempts to identify key differences freelancers acknowledge after making the use of technological tools for their career. This study will extract common things that could explain how a digitally enabled workforce could be a key to breaking down the dual labor market in South Korea.

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independent lives – backed by a system of mutual and public support.

### **3. Hyper-connectivity and the Change of the Labor Market**

The conventional structure of employment and the classical relationship between worker and company has changed because of the advent of 'hyper-connectivity'. The nature of 'hyper-connectivity' has the power to disrupt the conventional employment model which is vertically integrated companies hiring full-time employees to work eight-to-nine hours. People can move from role to role and across organizational boundaries more freely than ever before through hyper-connected job platforms (Schwartz et al., 2013). The structure of the labor market will become like a task force team in which individuals would get together and work for a certain time and then separate. Professor Richard Sennett from London School of Economics says that 'life-long career' in one company has changed into 'job' so each individual will have to prepare to transfer from one job to another like a 'merry-go-round' (유영성, 2013).

Hyper-connectivity does not necessarily mean the number of connections between peoples, things, and people to things. The hyper-connectivity is functioning not just as a hardware technology but also as a sort of infrastructure that can strengthen the individual's talent, capacity, potential, and bargaining power in the labor market even though they are not in the hub of networks or they are not members of official organizations. As a result, it could affect the working conditions of independent workers, such as the non-regular workers and freelancers who are not employed by organizations. Each individual could find a way to obtain employment or connect with people who can give them chances to work with through technologies (Reich, 2002).

The cumulative effect of hyper-connectivity is that the limitations of time and

space have largely been overcome. Therefore, hyper-connectivity has become a game changer in terms of the relationship between individual and company, the way people work, and finally the structure of the labor market (Brynjolfsson & McAfee, 2011). This Chapter focuses on the two ways that hyper-connectivity in the labor market would affect individual workers or small businesses, specifically those who do not belong to traditional networks or organizations. These two ways are the extension of individuals' capability and the extension of the marketplace for individuals.

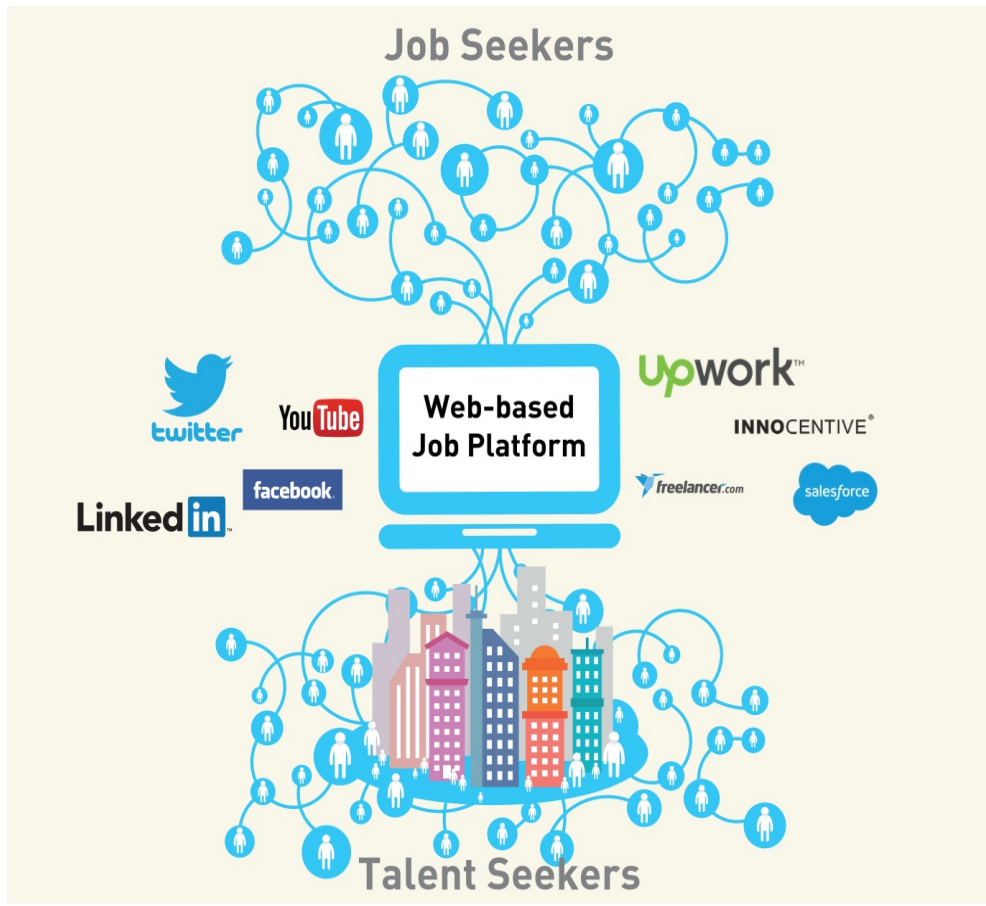
### **3.1 Extension of Individual's Capability**

One of the primary merits of using hyper-connected technology is the ease for the individual worker to find their next job. A 'web-based job platform' is a virtual place where job seekers and talent seekers could meet and find what they want, jobs or talent. Sometimes it is called 'Peer-to-peer employment market' (Hajkowicz et al., 2016), 'Online workplace' (Berland, 2014), 'Online crowd work' (Kittur et al., 2013), and 'online talent platform'<sup>3</sup> (Manyika, 2015). Although they are called by different names, they basically possess the same concept. Their most essential function involves matching people with jobs or tasks with the help of hyper-connectivity.

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<sup>3</sup> McKinsey Global Institute explains a few main jobs of 'Online talent platforms'; matching people and jobs, creating marketplaces for freelance work, helping firms hire and manage talent, and revealing trends in the demand for skills

[Figure.3-1] Concept Illustration of the Web-based Job Platform in the Labor Market

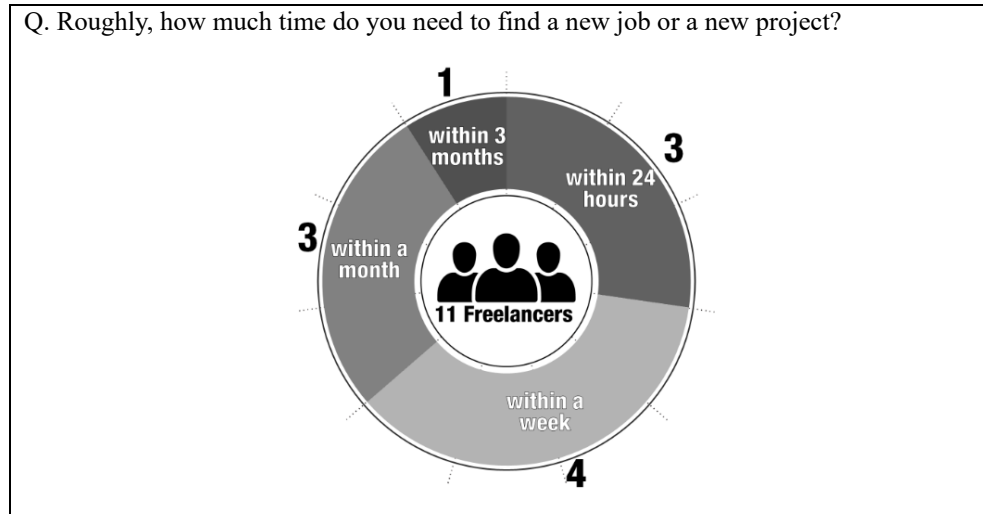


Web-based job platforms facilitate easy, standardized contracting so any company and any worker can form electronic employment relationships with tiny effort (Ghani, Kerr, & Stanton, 2014). In other words, individuals could reduce the transaction cost in the labor market even though they do not have a membership with any particular organization by using hyper-connected networks.

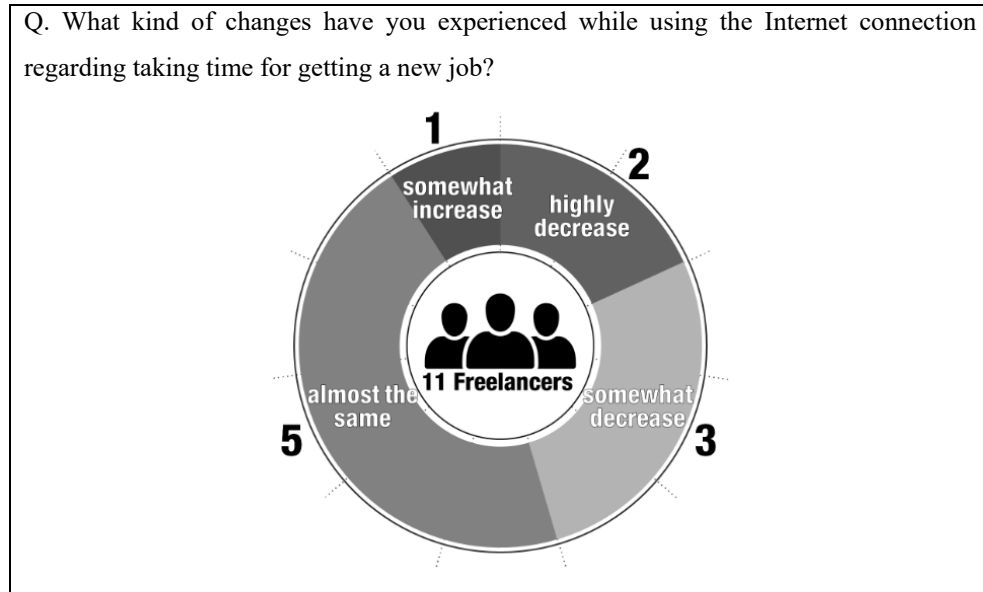
According to the survey of Freelancers Union, 73% of freelancers say that technology is making it easier to find freelance work. 51% of freelancers responded that they have obtained a project on-line, up from 42% in 2014. The time for getting a new job also becomes shorter than before. 7 out of 11 freelancer interviewees said that they usually got a new job or project within a week of ending

their initial job. And nearly half of freelancers responded that the time it took to find their job decreased significantly after using hyper-connected job platforms.

[Figure.3-2] Freelancer Interview



[Figure.3-3] Freelancer Interview

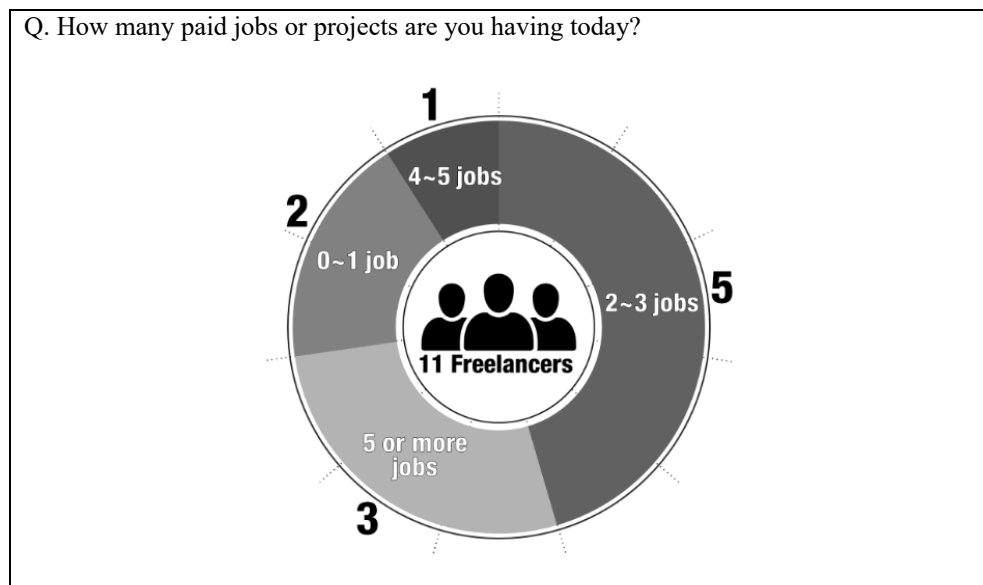


Freelancer interviewee Masaharu Hayataki, the Japanese translator and marketer, expressed that it was easier for him to find a next job than before.

*"Finding (jobs) is not difficult. (Not only I have to find jobs but also) clients find me and offer me projects."*

What is quite the significant point is that the freelancers got multiple employers or multiple clients by using the technology platforms. Only two freelancers among the eleven respondents received just one project as of the interview date. Nine freelancers received multiple paid jobs or projects ranging from two to ten as follows.

**[Figure.3-4] Freelancer Interview**



Freelancer interviewee, Muhammad Fasieh, a 28-year-old Pakistan marketing professional, said that he has worked with over 1000 clients after just two years of freelancing from small-scale projects to big projects. This means that he could diversify and also maximize his income sources with the help of hyper-connectivity.

For freelancers who are not employed by companies, it has always been a concern to earn a regular income. Sometimes they can make a lot of money. Other times they make no money at all. This income instability is one of the most adverse aspects of being an independent worker. Hyper-connected platforms could reduce this income instability by enabling freelancers to have multi-income sources.

There are many kinds of web-based job platform companies in the global labor market such as LinkedIn<sup>4</sup>, Upwork, TaskRabbit, Freelancer.com, and Kaggle. These web-based job platforms allow both individual workers and employers to advertise employment opportunities, promote themselves and access job markets that otherwise would not be readily accessible (Hajkowicz et al., 2016).

In addition to extending job opportunities through hyper-connectivity, individuals could access resources, equipment, and tools that they have never experienced before. Technology could make a virtual place where people can connect to anyone, anywhere and at any time, giving a small business – even individuals – the capabilities of a large firm (MBO, 2013). An Expert interviewee EV Boyle, Director of special projects at USC Annenberg Center on Communication Leadership & Policy, explained the benefits of technology in terms of the extension of the human.

*"On a basic level, technology always has been an 'enabler' of creativity like electrical light bulbs. I think that the Internet and computer are extensions of our exponential growth."*

Another Expert interviewee Steve King, Partner of Emergent Research Institute, asserted that digital technology could empower independent workers such

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<sup>4</sup> The largest web-based job platform is LinkedIn, which enables individuals to post public online profiles, much like resumes. It has amassed more than 364 million members around the world in just over a decade and is available in 24 languages (Manyika, 2015).

as non-regular workers in their careers. He runs a small firm. He takes his case as an example to explain how digital technology extends an individual's ability.

*"Absolutely, Digital technology provides independent workers with tools and capabilities that only a few years ago only large companies could afford to use. Our firm, Emergent Research, is an example. We have two employees at Emergent Research, myself and my wife. We work from our house. But we conduct deep research projects for large corporations, government agencies and others. We can do this because digital technologies give us the ability to do so. For example, we use sophisticated, cloud-based software tools that allow us to collect and statistically analyze large data sets. This type of work would have been way too expensive and complex for an independent worker to do even 10 years ago."*

Expert interviewee Sebastian Siseles, director of international affairs for a job matching company, expressed this seismic change as a magical time for small or individual entrepreneurs.

*"10 years ago, setting up a '.com.' Company, for example, involved a capital of expenditure of over \$100,000, get the team, the engineers, servers, and without even going live. Nowadays, with a credit card you can buy a domain, secure the payment, and get the best talent around the world to create your website, logos and all that is needed to get your site or App. All without moving from your place and for a fraction of the cost compared to 10 years ago. We like to say that it is a magical time for (individual) entrepreneurs."*

Another expert interviewee Woo-jin Park explained this with an example of computer programmers these days.

*"Unlike the past, computer programmers could do much bigger projects with a small number of people by taking advantage of hyper-connectivity. For*



*example, the process of developing a Java program becomes much easier than before because freelancers can get a lot of related resource codes from anywhere on the web. In the past, they had to develop around 10,000 lines of coding. However, these days 300 lines are enough for finishing a coding work. Freelancers could make the most use of wisdom which other developers already did. What is more important is that they could do multiple jobs for many clients because they could reduce the time in finishing each project."*

Simply speaking, technology allows individuals to scale up and deliver products without having to build the huge factory and bureaucracy that 20th-century enterprises relied upon (Mettler & Williams, 2011).

### **3.2 Extension of Marketplace for Individuals**

Another important function of hyper-connectivity is an extended global marketplace for individuals. A hyper-connected marketplace could give each person access to limitless markets. For example, in the hyper-connected society, a small business or even a self-employed individual could sell its products or its own services to a marketplace that has never experienced them before.

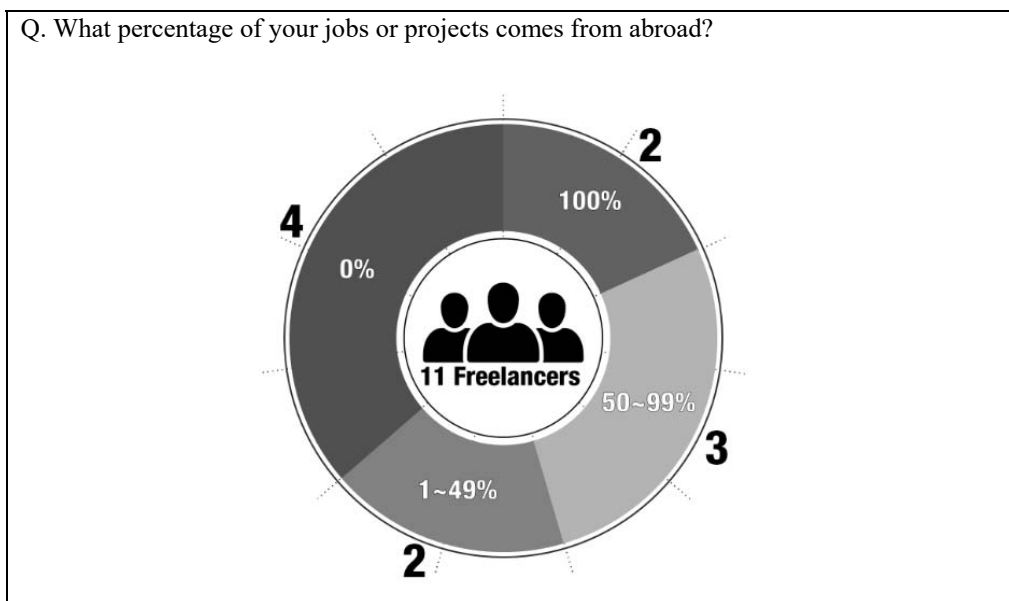
In the past, only large vendors, distributors and product manufacturers could dominate retail outlets to consumers (Mettler & Williams, 2011). However, things have changed these days. Web-based marketplaces such as Amazon, eBay, and Apple's AppStore have paved the way by which small producers could sell their goods, services, and even digital products in the global market. Online markets allow small businesses and start-ups to exploit low entry barriers such as low initial capital investment requirements, easy access to marketing and distribution channels, and no relevant advantage due to location (Hajkowicz et al., 2016).

Some experts explained this phenomenon as a micro-multinational. A micro-multinational is a type of company that does business in a global market with few

employees, capital, and infrastructure. From the first day on the job, micro-multinationals, including independent workers, can access international markets through hyper-connected platforms provided by companies like Google Inc., Amazon.com, eBay Inc., Skye, and FedEx Corp.(Mettler & Williams, 2011). SW Yu, CEO of K Cube Ventures, explained that it has become much easier for small businesses to enter into the global market because they can deliver their services just by uploading in the app stores such as Google Play without setting up an office overseas(Lim, 2016).

The examples of extended marketplaces through hyper-connectivity could be found among the cases of freelancer interviewees. Many freelancers interviewed expressed that they have sold their talents or services beyond their regions where they live. 7 out of 11 freelancers responded that all or part of their jobs came from abroad, beyond their local boundaries.

**[Figure.3-5] Freelancer Interview**



Jai Al-Attas, the Australian entrepreneur, was interviewed at the Silicon Beach Conference in Los Angeles in April 2016. In an interview, he noted that he started

his start-up in Australia. After setting up the start-up, he found that the market he could access to was much bigger than he had expected so he made up his mind to set up one more office in the United States to meet the market needs. He said that hyper-connectivity increased the marketplace for his opportunities.

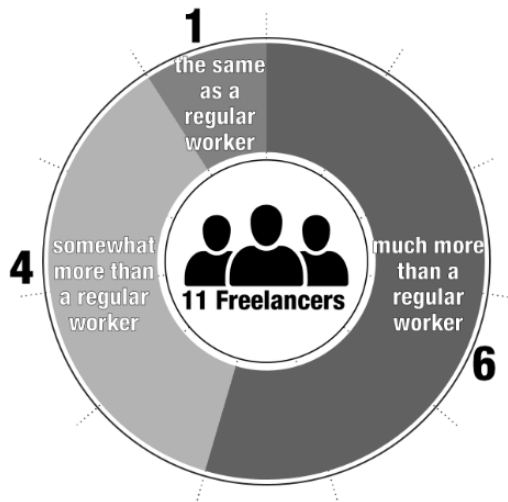
One of the most advantageous points of an extended marketplace for independent workers is that it is likely to make them focus on a few specific works instead of making them a jack of all trades. Expert interviewee Jeff McQuillan explained his experience with the process of concentration and specialty in his career. He has run one of the most famous English-education podcasting companies in the world for over ten years. Every month, five million people download his English episodes through the company's web page or smartphone application. At first, Jeff started this educational application as a hobby because he had to do a few other 'real' jobs for a living such as teaching English teachers as well as consulting work for language education firms. As time went by, the number of podcasting members grew exponentially with the widespread use of smartphones worldwide. With the help of an extended marketplace influenced by hyper-connectivity, he was able to quit his 'real' jobs and concentrate on his former hobby. He recalled that time as such:

*"I would never be successful without the Internet world. New markets are born that never existed before. I was very lucky to be in the right place and the right time."*

The extension of the marketplace is also related to the level of expertise of each independent worker. According to the in-depth interviews and freelancers Union's survey, hyper-connected marketplaces are likely to increase the expertise of independent workers. In reality, 10 out of 11 freelancers responded that their expertise and skill in their career grew more than a full-time payroll job employee in a similar field. Moreover, 6 out of 9 freelancers replied that their expertise and skill increased at a much higher rate than a traditional full-time employee.

**[Figure.3-6] Freelancer Interview**

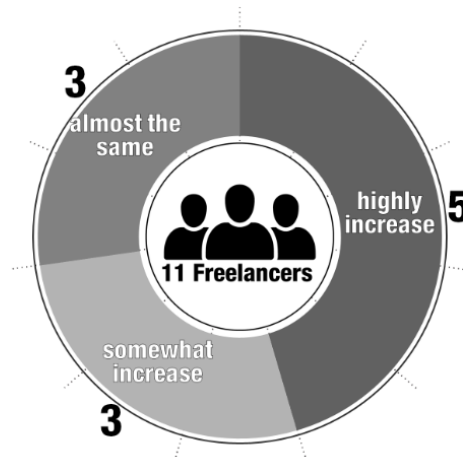
Q. Do you think your expertise (or skill, professionalism) in this career increases more than a full-time payroll job employee in a similar field?



Furthermore, 8 out of 11 freelancers positively responded that their expertise in their career increased after using the Internet connection. It could be explained that extended marketplaces could equip them with more expertise in the labor market.

**[Figure.3-7] Freelancer Interview**

Q. What kind of changes have you experienced while using the Internet connection comparing to a time period when not using the Internet connection regarding the expertise of career?



Freelancer interviewee Masaharu Hayataki, the Japanese translator and marketer, explained that his expertise in his career highly increased after using a hyper-connected job platform. In his early days as a freelancer, his rate was only \$0.01 per word. But after two years of freelancing, he has over 70 projects. Thanks to his growing expertise, he does not accept projects less than \$0.08 per word and now has more free time than ever.

*"Compared to my previous job, freelancing allows me to earn more while working less."*<sup>5</sup>

Expertise in their jobs is critical to success, especially in a niche market.

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<sup>5</sup> Interview with the Freelancer.com <https://www.freelancer.com/community/articles/japanese-freelancer-works-and-wanders-all-over-europe>

Expert interviewee Woojin Park, CEO of Elancer, explained that many freelancers like to dive deep into the field that they enjoy such as Java, cloud computing, and big data.

*"As far as I know, a lot of freelancers do not want to be employees of a particular company. The top reason is that they want to control their time in their own way. Also, they really want to dive deep into a particular field that they like such as Java, Big data and so on. However, they cannot concentrate on what they like if they are employed by regular companies."*

However, concentrating on what you really like is easier said than done. It is impossible for people to focus on a specific field they like if they do not have enough jobs. Under the limited time and space resources, freelancers are likely to take a variety of tasks even though they do not want to do them. Under the hyper-connected circumstances, however, freelancers are likely to have opportunities available to them to be able to make a living by just doing what they want to do better.

It could be explained by using the concept of the long-tail. The long-tail is a word coined by Chris Anderson. He described 'the long-tail' in his book as follows: "Products that are in low demand or have low sales volume can collectively make up a market share that rivals or exceeds the relatively few current bestsellers and blockbusters, but only if the store or distribution channel is large enough."(Anderson, 2007). Anderson emphasized that if the markets are connected enough, there are more opportunities for products to be sold even though they are not popular.

Seung-byung Chae, chief researcher for Samsung Economic Research Institute, also predicted the future of business as such<sup>6</sup>: there will remain mass

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<sup>6</sup> Book review of 'Makers' written by Chris Anderson

products and services that are provided by conglomerates in the future. However, there will be a lot of tiny needs that are not satisfied with mass products or services as well. Those tiny needs could be satisfied by small businesses. The same could apply to the labor market. Unlike in the past, small businesses or individual workers of today could make their living with their particular, distinct, and unique talents in the hyper-connected marketplace.

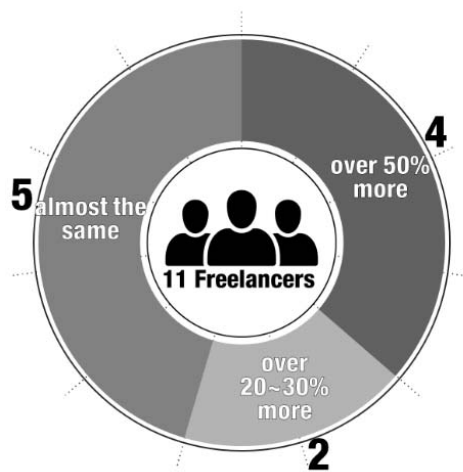
## 4. The Rise of Independent Workers

### 4.1 Changing Working Conditions via Hyper-connectivity

With these changes, more workers could maximize their earning potential while achieving greater job satisfaction without belonging to organizations as regular employees. 6 out of 11 freelancers replied that they had received a higher monthly income than a full-time payroll job worker. Five others replied that their salary is almost the same as a full-time payroll employee. Furthermore, 5 out of 11 freelancers stressed that they had experienced an increase in their monthly incomes after using the Internet connection.

[Figure.4-1] Freelancer Interview

Q. Roughly, what is your monthly income compared to a full-time payroll job worker who has a similar job and career experiences?



This trend appears not only among the high-income freelancer group but also for ordinary independent workers such as Uber drivers, dog walkers<sup>7</sup>, and simple

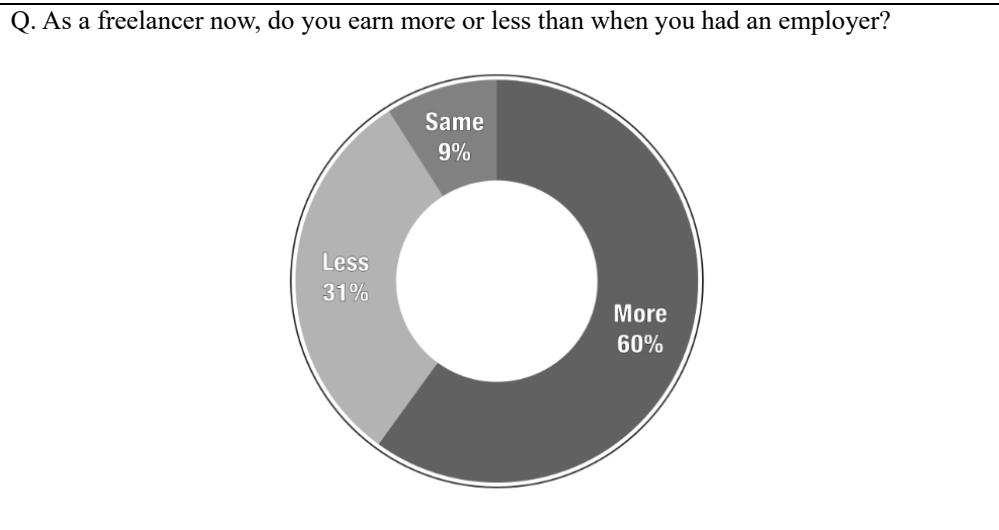
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<sup>7</sup> Dog walkers are people who take others' dogs out for a walk. Sometimes, they take many dogs for a walk at once. They are paid by dog owners. They can earn 20 to 30 U.S. dollars per hour depend on



task workers. According to the survey of Freelancers Union, which includes not only high-income freelancers but also ordinary independent workers, 60% of freelancers who left traditional employment are earning more now with 3 out of 4 seeing an increase within the first year.

**[Figure.4-2] Freelancers Union survey (2015)**

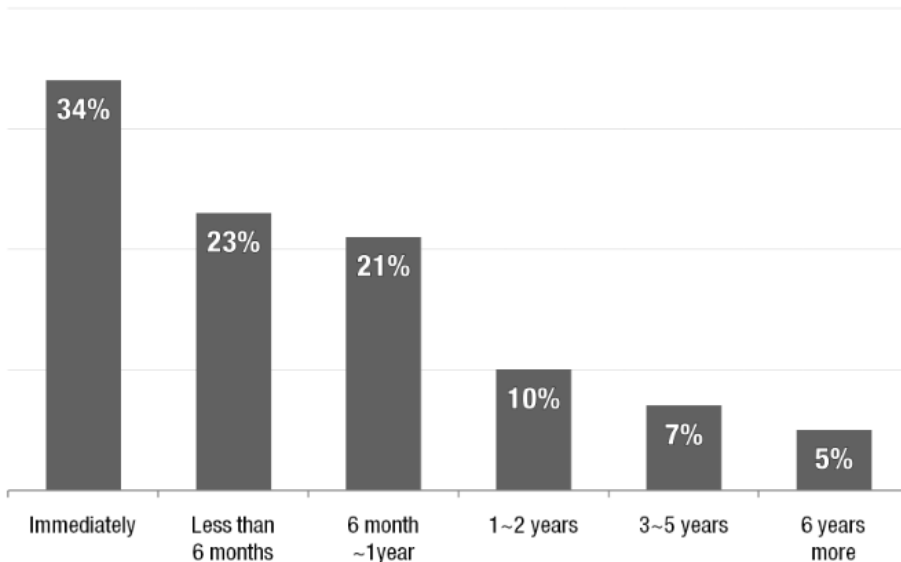


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their skill, experience, and location. These days, they usually meet their clients through mobile applications which connect dog owners and dog walkers.

**[Figure.4-3] Freelancers Union Survey (2015)**

Q. After leaving your job with an employer, how long did it take you to earn more as a freelancer than you did with an employer?

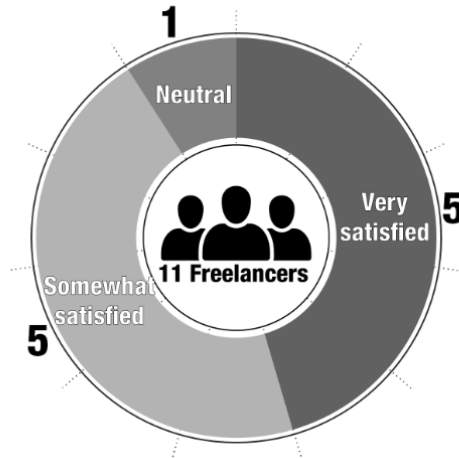


Additionally, job satisfaction among independent workers has a direct link to their income. The level of job satisfaction among independent workers appears to be high from the in-depth interviews of freelancers. 10 out of 11 freelancers responded that they were satisfied with their job. Five of them, in particular, said that they were very satisfied with their jobs.

More importantly, the level of job satisfaction among freelancers grew after using hyper-connected job platforms. 9 out of 11 freelancers responded that they experienced an increase in job satisfaction while using the Internet connection compared to a time period when not using the Internet. Furthermore, 5 out of 9 positively responded freelancers stated that their job satisfaction has highly increased.

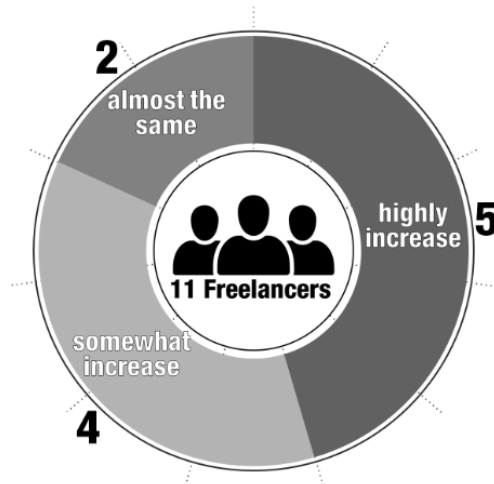
**[Figure.4-4] Freelancer Interview**

Q. How satisfied are you overall with your job?



**[Figure.4-5] Freelancer Interview**

Q. What kind of changes have you experienced while using the Internet connection comparing to a time period when not using the Internet connection regarding a job satisfaction?



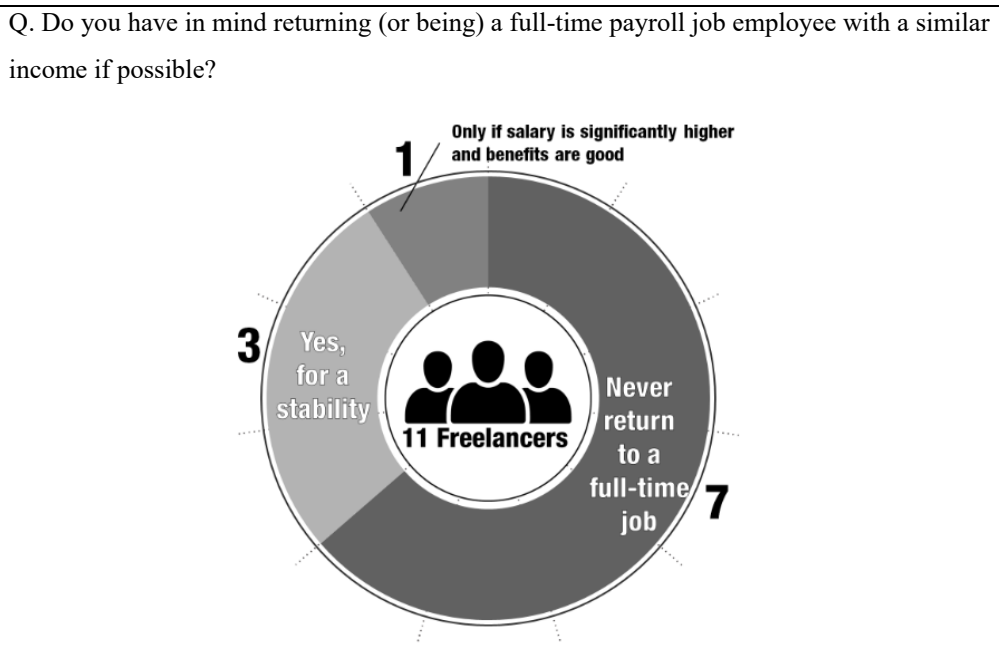
Moreover, this study discovered that freelancers are not interested in being traditional full-time regular workers even though they did have some anxiety about

their future job prospects. 7 out of 11 freelancers responded that they would not return to a traditional full-time job with a similar income. Interviewee Muhammad Fasieh pointed out as follows.

*"I would not return to a traditional employee. I don't want to limit my working capabilities."*

Only three freelancers said that they wanted to return to a full-time job because they preferred a more stable life. One freelancer interviewee, Colton, responded that he would get back to a traditional full-time job only if his salary significantly higher than before and the benefits are better.

**[Figure.4-6] Freelancer Interview**



A similar outcome appeared in the survey conducted by Freelancers Union. According to the Freelancers Union, half of the respondents replied that "there is no amount of money where I would definitely take a traditional job."

## 4.2 Increasing Number of Independent Workers

A freelancer is one of the most well-known types of independent workers in the general workforce. However, there is no official legal term for a freelancer even in the United States. Instead of using the term freelancer, 'independent contractor' is more widely used in the U.S. labor market. Generally, an independent contractor is regarded as a freelancer and sometimes these two could be interchangeable(이승렬, 2013). According to the Bureau of Labor Statistics, the definition of an independent contractor is as such: "Independent contractors are workers identified as independent consultants, or freelance workers, whether they were self-employed or wage and salary workers." Freelancers Union defines freelancers as individuals who have engaged in supplemental, temporal, project-based, or contract-based work in the past 12 months.

Independent contractors or freelancers are not a brand-new type of workforce in the labor market at all. However, freelancing has been highlighted these days because the number of freelancers in the United States is rapidly increasing with the help of technology, especially, hyper-connectivity. As described in a previous chapter, hyper-connectivity has transformed a workforce environment in which independent workers are exposed to more job opportunities and can extend their capabilities, and sell their products, services, and know-how beyond temporal and spatial limitations.

According to the Bureau of Labor Statistics in the United States, the official number of independent contractors in 1995 was 8.3 million, which took up 6.7 percent of total employment. This figure grew to 10 million workers in 10 years which took up 7.4 percent of total employment in the U.S. The number of independent contractors is even larger if we apply a broader standard<sup>8</sup> for an

independent worker. According to a report of MBO partners, the number of independent workers in the United States in 2013 was 17.7 million<sup>9</sup>. MBO partners predicted that the number of independent workers in America would increase to 37.9 million by 2020.

Moreover, there is a report which estimates that the number of independent workers will be even higher than what was discovered by MBO report. Freelancers Union and Upwork asked Edelman Berland, an independent research firm, to conduct a study of the freelance workforce within the United States to quantify the number of people freelancing there. Edelman Berland conducted an online survey of 7,107 U.S. adults who have done paid work in the past 12 months. According to this inquiry, the size of independent workers is estimated to be 53million<sup>10</sup> in the United States. Assuming the size of the total labor force is 153 million, it can be concluded that 34% of the U.S. workforce is working independently. These independent workers contribute an estimated \$ 715 billion annually in freelance earnings to the U.S. economy (Berland, 2014).

### **4.3 Drawbacks of Being Independent Workers**

According to the recent survey of Freelancers Union, a third of the U.S

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<sup>8</sup> MBO partners (Firm that provides management services for independent professionals)

defines independent workers as Americans of all ages, skill, and income levels who turn to freelancing, contract work, consulting, temporary assignments or on-call work regularly each week for income, opportunity, and satisfaction.

<sup>9</sup> According to MBO partners, independent workers generated more than \$1.15 trillion of revenue in 2015. That sum, equal to nearly 7 percent of U.S. GDP, was up 5.8% from 2014 and is 26% higher than the 2011 total.

<sup>10</sup> Freelancers Union divides 2,429 freelancers into 5 segments as followings: (1) Independent contractors: 36% (2) Moonlighters: 25% (3) Diversified workers: 26% (4) Temporary workers: 9% (5) Freelance business owners: 5%

workforce is regarded as independent workers in the United States. They already take up a large share of the workforce of the United States. Moreover, the number of independent workers is expected to increase in the near future. As discussed in an earlier chapter, more and more workers have jumped into the life of independent workers voluntarily because of the advantages of hyper-connectivity, the extension of individual capability, and marketplace.

Besides several advantages as individual workers, there is another reason for the growing number of independent workers in the labor market in the United States. The growing demand from business sectors could explain this trend. Hyper-connectivity could be the doorway for opportunities for companies as well as individuals. As a business entity, companies always want to reduce their costs as much as possible because labor costs are the most burdensome for most their business owners. With the help of hyper-connectivity, companies can reduce their labor cost. In other words, companies could achieve their goals with fewer employees. Companies may opt for staffing models which include a small number of core staff, with many other roles provided by the freelancer or portfolio worker community (Hajkowicz et al., 2016). No doubt, there a myriad of benefits<sup>11</sup> for employers to hire independent workers rather than full-time payroll workers. An expert interviewee, Woojin Park explained this phenomenon as follows.

*"Ordinarily, employers wouldn't have bothered hiring employees as regular payroll workers for a long time, especially in the computer related industries. It is actually impossible to retain them in an ever-changing technological environment."*

This trend is expected to go on in the future. Expert interviewee

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<sup>11</sup> Generally, employers could reduce the cost of mandated contributions for social security and unemployment taxes. Also, employers could save on discretionary fringe benefits such as sick leave and vacation time (Miller, 2014).

Alexander J. Selicha, the investigator for the U.S. Department of Labor, forecasted that more and more companies would likely transform into Uber or Lyft-like ones.

*"I think, if you look at companies like Uber and Lyft, those companies are the future of the way people are going to do business in the United States. I think these trends will go on."*

According to a study conducted by software company Intuit, roughly 80 percent of large corporations plan to expand the use of freelancers by the year 2020(Cooper, 2015). With these trends, hyper-connectivity confronts us with challenges as well as benefits. There are some drawbacks with hyper-connectivity such as privacy invasion, the unpredictability of system, and alienation of human beings. However, this study will focus on disadvantages that are related to the labor market.

### **4.3.1 Safety Net Loophole**

One of the most serious problems a hyper-connected workforce would present is a deterioration of a safety net. Basically, traditional full-time permanent workers could get many kinds of benefits such as basic salary, pension, health insurance, unemployment and occupational health and safety insurance, overtime payment, paid sick, holiday or vacation leave. Employers generally extend some of these benefits to their employees. However, these benefits can at times be burdensome to the employer. However, under the hyper-connected society companies are more likely to have more opportunities to lower these labor costs dramatically<sup>12</sup>.

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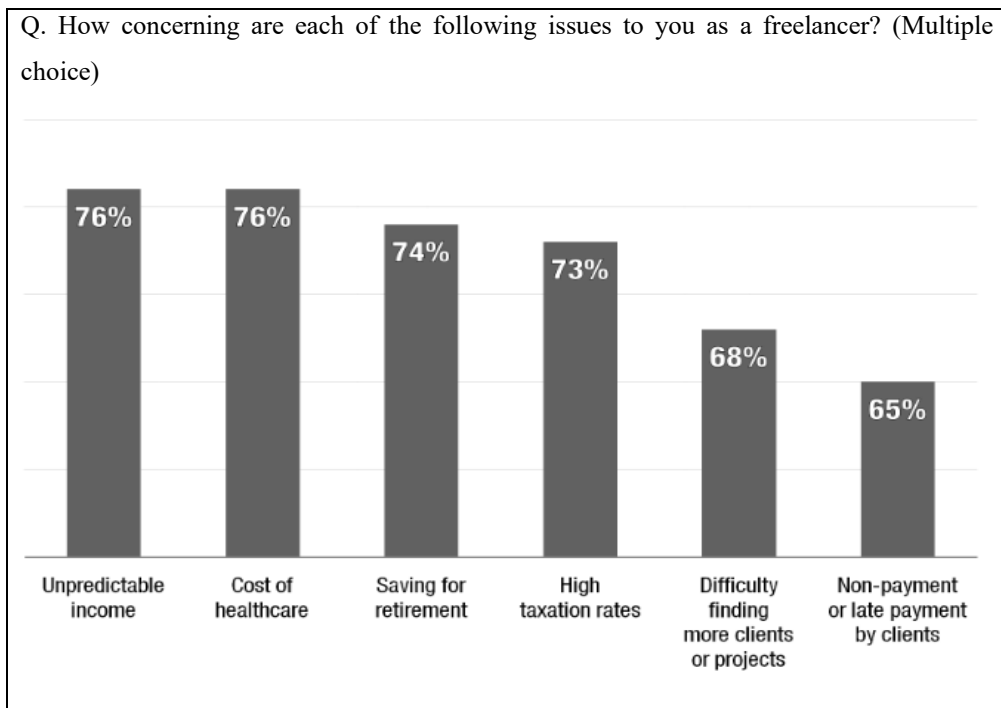
<sup>12</sup> According to the research of Hill, a business can lower costs by 30% or more by evading contribution of worker's health benefits, social security, Medicare, unemployment insurance, injured compensation, lunch breaks, paid sick days and vacation leave by hiring independent workers(HILL, 2015).



The accelerated use of independent workers has in turn begun causing a rapid erosion of the safety net for workers and families. Employers could save costs by avoiding payment of mandated contributions to social security and unemployment taxes. With these reasons, workers are much likely to be at risk of having a loosened safety net.

As described earlier in this study, the majority of freelancers responded that they earn more than regular full-time payroll workers. Also, they replied that they were satisfied with their work overall. However, they all felt anxious about their future in regards to unpredictable income, the cost of healthcare, and saving for retirement at the same time.

**[Figure.4-7] Freelancers Union Survey (2015)**

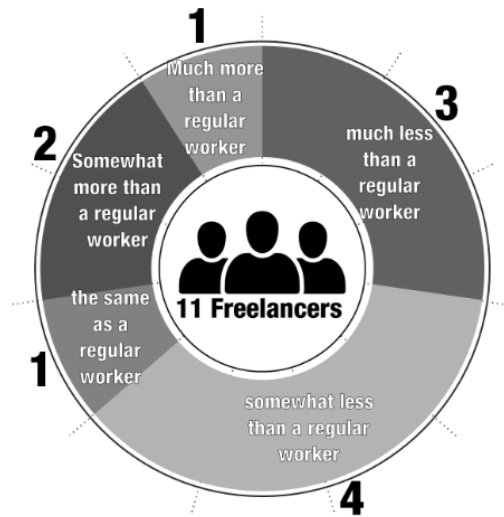


However, it is more than a feeling of anxiety. Freelancers receive less social insurance benefits in their real life. Over half of the freelancers interviewed replied that they do not enjoy social insurance benefits as much as regular full-time

employees in a similar field.

**[Figure.4-8] Freelancer Interview**

Q. How do you think about your social insurance benefits such as health care, unemployment insurance, disability insurance, and pension compared with a regular full-time employee in a similar field?



Expert interviewee Alexander J. Selicha, the investigator for the U.S. Department of Labor, expressed his worries about the freelancer economy.

*"It is seen as a loophole in the law...to have an independent contractor. There are a lot of loopholes in the tax codes as well."*

### 4.3.2 Global Labor Arbitrage

As mentioned in a previous chapter, the number of independent workers who seek job opportunities based on the technology of hyper-connectivity has been growing very fast. Admittedly, the number of employers who try to find the right independent workers in the hyper-connected job platforms also has been increasing.

However, the number of employers is much smaller than the number of workers. From the perspective of the basic economic point of view, it could be called a 'supply excess' market. There would be a higher competition between job seekers.

As a result, their incomes are likely to be smaller than before. Some experts call this a global labor arbitrage. A global labor arbitrage is an economic phenomenon where, as a result of the removal of boundaries of a world market, jobs move to countries where the cost of labor is cheaper than in other places. Roach illustrated this phenomenon in the New York Times (2004): "Under unrelenting pressure to cut wage workers here with information technologies allowing products and now knowledge-based services to flow more easily cross borders, global labor arbitrage is likely to be an enduring feature of the economy."

Apart from the global labor arbitrage, there could be a big imbalance between independent workers who work based on the hyper-connected job platform. As independent workers have more opportunities to do their business for broader markets beyond temporal and spatial limitation, some of them are likely to receive more rewards than ever before like superstars in businesses. Expert interviewee Kiu-Sik Bae, a senior researcher at the Korea Labor Institute, explained this situation in the following;

*"If freelancers are excellent in their career, or they have well-established positions in the market, then they are likely to have enough dealing power when negotiating with clients. There is no problem if they have unique talents in the labor market. However, if not, there will be some problems as separated individuals. Companies are likely to make the wrong use of this just for lowering their labor costs."*

This is a kind of 'winner-take-all' economy, and this could lead to a big imbalance in a whole society (Brynjolfsson & McAfee, 2011).

### 4.3.3 Non-payment

Unlike the traditional workforce system, independent workers are likely to have more than one employer. Many workers today are no longer employed for very long by a single company. More and more workers have multiple employers, and the work day is being segmented and reduced into shorter and shorter "micro-gigs"(HILL, 2015). Contrary to traditional regular workers who generally do not worry about getting paid each month, timely compensation is one of the most anxious issues among independent workers.

With no protection under current labor law, the rapidly growing independent workforce- including self-employed workers and independent contractors- has been rocked by nonpayment, late payments, theft, and illegal deductions. Freelancers Union conducted a survey that included over 3,000 independent workers on the subject of nonpayment in 2009 (Rodgers III, 2010). According to this data, 35% of independent workers in New York State were paid late, and 11% of workers were paid less than the agreed upon amount. Moreover, 14% were never paid any of their wages<sup>13</sup>. What is a bigger the problem is that traditional regular workers are protected from the threat of nonpayment under the Department of Labor, but independent workers have no official and public protections(Horowitz, Erickson, & Wuolo, 2010).

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<sup>13</sup> In 2009 alone, the lost wages (paid late, paid less, and never paid combined) could cover \$2.8~4.7 billion in the New York State.

## **5. Implications for Labor Market Reform**

So far, this study has dealt with the concept of hyper-connectivity, the meaning of hyper-connectivity in terms of an individual career, and dual labor market of South Korea. In this chapter, this study proposes several implications for labor market reform in South Korea. The government of South Korea has made numerous efforts to reform the labor market over the past 20 years. Additionally, President Park has also pushed for labor market reform immediately after her inauguration in 2013. However, such efforts have failed to make any differences.

It is time for the government to think differently in regards to labor issues. Technology, especially the characteristic of hyper-connectivity, has changed the landscape of the labor market and even the definition of jobs as well. Simply speaking, it is the end of work as we know it (Good, Farley, Tambe, & Cantrell, 2014). It is straightforward and clear why the government should change its approach toward labor policies. Hajkowicz emphasizes that there is no doubt that technology will keep changing in the future as well as workplace structures, operations and relations between employers and employees. Existing laws, regulations, and policies should be adjusted to keep pace with the changing working conditions(Hajkowicz et al., 2016).

### **5.1 Possibility of Breaking Down of Dual Labor Market**

South Korea's government has pushed for and strongly advocated for labor market reform as a primary issue for its future economic growth. Without viable and serious attempts to ameliorate South Korea's current divided labor market, South Korea will continue to fall behind globally. The dual labor market is the focus of labor market reform. It is highly recommended that labor market reform should start with dismantling the current dual structure of South Korea's labor

market. However, it would not be recommended to drag down the benefits of regular workers with a political intention. It is also not feasible to transfer non-regular workers into regular positions by encouraging companies to do so. Such intentional plans would only be unproductive in the free market economy. The more desirable approach is to upgrade the working conditions of non-regular workers by making the most use of hyper-connectivity and implementing new social contracts.

First of all, the government of South Korea should discard the deep-rooted idea of 'Regular worker vs. Non-regular worker' as it pertains to the following: 'a regular job is good while the irregular is bad', 'irregular workers are weak and weary people so they need to be protected', 'companies should hire workers as regular workers as much as possible', 'companies should transition their irregular workers into regular workers even though it costs them more'. These traditional approaches are not in accord with today's modern labor market. As a result, these approaches would not be feasible and sustainable. What is more, they are not fundamental solutions.

South Korea's government should be open to the idea that hyper-connected technology could provide a new type of social and economic infrastructure for labor market reform. Technology is not just a tool, but it is a social and economic infrastructure in which people can expand their abilities, potential, and their marketplace. Fortunately, South Korea is consistently ranked at the top regarding technology<sup>14</sup> and education level<sup>15</sup> of its citizens. The government should capitalize on these valuable resources that it had already in order to reform the labor market. If South Korea capitalizes on the enormous opportunities that come

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<sup>14</sup> According to the report of 'The State of the Internet' by Akamai(2013), South Korea took the first place in the world regarding an average connection speed and the broadband subscription percentage among citizens.

<sup>15</sup> According to OECD, South Korea is one of the highest countries in the tertiary education pass rate which is 68.1% among 25~34 while 41% of OECD average.

from the potential productivity of hyper-connectivity and compensates for drawbacks that derive from hyper-connectivity, reformation of the labor market could be achieved. Furthermore, South Korea could lead the way in this field and sustain its economic growth making it one of the leading economies in Asia and as a future model for other countries to follow.

The hyper-connected workforce could be the catalyst for alleviating the dualism in the labor market in South Korea. Unlike the labor market of South Korea, the boundary between regular workers and non-regular workers in other advanced countries has started to collapse due to the hyper-connected labor market. Contrary to our fixed idea about non-regular workers, there have been a lot of non-regular workers who start their career by choice not by necessity. All of the freelancer interviewees responded that they began their careers by their own volition. According to the survey of Freelancers Union, 60% of freelancers replied that they started their careers voluntarily. Because of this choice, they are enjoying a much higher than expected income. Approximately, 60% of the respondents who left traditional employment now earn more than they did in the past. Of that 60%, most (78%) said the increase in income occurred within a year.

This trend is same for the 11 freelancer interviewees. 6 out of 11 responded that they earn more money than regular workers in the same field while the rest said that they earn almost the same as regular employees. In addition to income level, the level of job satisfaction appears higher than expected. 9 out of 11 freelancer interviewees stated that they experienced greater job satisfaction after using an Internet connection. Moreover, 7 out of 11 freelancer interviewees responded that they would not return to being full-time payroll job employees with a similar income.

By capitalizing on hyper-connectivity, individual workers who are not employed by organizations are more likely to extend their capability and could have a much bigger market in which they can sell their unique goods, services, skills, and know-how. In addition, their incomes and job satisfaction will likely increase as their expertise in their careers become higher. This kind of virtuous

cycle could be the catalyst for eliminating the barrier between regular workers and non-regular workers.

## 5.2 New Engine for Job Creation

The Park Geun-Hye administration pledged that it would achieve the goal of 70% employment within its 5-year-term in 2013. However, the employment rate is still 65% as of 2015. A hyper-connected workforce could be the remedy for achieving the government's 70% employment rate goal. According to the report of MBO partners, independent workers do not always work independently. They are not just employees for some projects but also they could employ other independent workers as well. Independent workers usually hire other independent workers by using hyper-connected platforms. This is contrary to the traditional network where only the owner or hubs of the network could have the power to hire other members or nodes. From the perspective of a complex network, a hub could be the terminal node and the terminal node could be a hub between networks as well.

There is a relevant case among freelancers interviewed in this study. Muhammad Fasieh, a Pakistan entrepreneur, was an ordinary employee before he found the web-based job platform in 2013. He discovered the enormous opportunities in hyper-connectivity and then he quitted his job and started freelancing based on the web-based job platform. After two years' effort, he became an entrepreneur as well as a freelancer. In an interview with the job-platform company he said as such:

*"Little by little, the site (web-based job platform) changed my life. I realized that it is not only a platform that provides extra income; it is also a learning portal. At 27, I became an entrepreneur. I opened my own design studio and hired a team of 10 people. I never expected this immense career growth."*



According to the report of MBO partners, 36 percent of independent workers spent \$100 billion in 2015 for hiring other independent workers on a contract basis.<sup>16</sup> This data means that an independent work is not just a source of alternative income but also as a source of jobs(MBO, 2015). A few advanced countries came to realize that a lot of jobs are achieved from different ways such as freelancer, independent contractor, start-up, and another non-regular worker. The United States has benefited from these new types of the workforce individuals during the economic downturn. Expert interviewee Alexander J. Selicha, the investigator for the U.S. Department of Labor, explained it this way:

*"The U.S. economy could maintain the usual unemployment rate during the global economic crisis in 2008 and 2009. There were many factors for that rate. Independent contractors are one of the most important factors for this. The percentage of independent contractors in the U.S. labor market amounts to around 30 percent."*

The data shows that 65% of all jobs created in the United States between 1997 and 2008 were jobs that entrepreneurs made for themselves, and this could be a cornerstone of modern economic activity(Lowrey, 2011). In Europe, over 32 million<sup>17</sup> people are classified as self-employed, which accounts for more than 15% percent of total employment(Mettler & Williams, 2011). As a result, independent workers are the most indisputable engines of job creation, and this could boost the level of the employment rate. It might be hard for South Korea's government to

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<sup>16</sup> This is the similar amount of money employing 2.4 million full-time workers in a traditional way (MBO, 2015).

<sup>17</sup> The vast majority of Europe's self-employed are freelancers, meaning they work for or in one-person companies. And while the crisis has had a negative impact on the overall employment situation in Europe, a European Commission study entrepreneurs were much more resilient to the economic downturn than dependent workers and employees (Mettler & Williams, 2011).

achieve 70% employment rate goal without thinking about the hyper-connected workforce.

## **5.3 Time to Think A New Social Contract**

Although hyper-connectivity could make positive influences toward in the labor market, it could bring several adverse impacts to the labor market as well. If we cannot deal with certain negative effects such as safety net loophole, global labor arbitrage, and non-payment, South Korea's labor market could deteriorate even more. Therefore, the government should focus on developing a new social contract under the hyper-connected labor environment, which would possess a few serious side effects.

### **5.3.1 Individual Insurance Account**

South Korea's government should leave the decision to the free market whether companies hire people as a regular or non-regular worker. Instead, the government should focus on how to reshape and redesign the social safety net that would likely erode under the hyper-connected workforce. Former Treasury Secretary of the United States Larry Summers pointed out this situation as such "The unraveling of the traditional employer-employee relationship has made it more difficult to provide basic economic security."(Prosperity, Summers, & Balls, 2015)

Sara Horowitz of the Freelancers Union criticized the lagging labor policies of the United States. She illustrated that despite a dramatic shift to a flexible, temporary workforce, the social safety net that was structured to support full-time employees has not evolved to meet the needs of the 21st-century workforce(Horowitz et al., 2010).

While digital technology enables new and flexible ways of working, flexibility can also be associated with uncertainty and precariousness. While employers are likely to increase profits by saving labor costs by using more independent workers, independent workers are more apt to be at risk in this type of work environment scenario. Renee Leon, the Secretary of the Department of Employment of Australia, contends that "We must provide an appropriate safety net while enabling people and organizations to take advantage of new opportunities as they emerge."

Regulation needs to accommodate the changing nature of work while providing a reasonable level of protections. An 'Individual Security Account (ISA)' is believed to be a reliable alternative for the old safety net which just supports permanent full-time workers. An Individual Security Account (ISA) is a kind of social safety net for each independent worker. The most important concept of an ISA is "portability". An ISA acts as a personal support infrastructure which follows the worker from job to job, project to project, and employer to employer. Each worker's ISA would be tracked with a personal ID number (HILL, 2015).

In Canada, any worker could sign up for employment insurance if he or she works for over one hour per week. Also, every work experience, including a side-job, could be applied to employment insurance. Moreover, the right to get allowances is determined by total working hours, not by the number of days of the registered(금재호, 2011). However, it is harder for Korean workers to get unemployment allowances due to complicated conditions for social insurance. For example, regarding unemployment insurance, workers are excluded from being members if their working hours are less than sixty hours within one month.

In Australia, the government is trying to take different approaches to address the emerging issues raised by the quickly evolving nature of the organization of work. Australia's government has sought to make relevant regulatory and legal frameworks so as to ensure that independent workers could access the rights and working conditions that are equivalent to traditional regular workers(Hajkowicz et al., 2016). Like these efforts of other countries, South Korea's government should

start to discuss viable alternatives that will act as an adequate safety net for independent workers in an evolving workforce situation.

### **5.3.2 Making Fair Labor Markets**

Making a fair marketplace is one of the fundamental roles of government. South Korea's government has endeavored to make an environment in which large corporations as well as small and mid-sized companies, could grow together. This kind of effort should be reinforced under the situation where there are much more independent workers. Unlike regular full-time workers, independent workers do not have enough protection when they make a contract or work with clients. Due to this vulnerability, there needs a fairer marketplace.

First of all, the government should be careful about the delay in the payment of wages for independent workers. Also, governments should consider a second chance policy. Many would-be entrepreneurs do not start a company because of their fear of the consequences of business failure. The European Commission has introduced a 'second chance' policy designed to create more conducive conditions for entrepreneurs. The policy includes support systems to prevent bankruptcy and when bankruptcy cannot be avoided, automatic discharge and debt settlement within three years (Hajkowicz et al., 2016). The Australian National Innovation and Science Agenda is looking to reward risk taking by investing in innovation and entrepreneurship, introducing new tax offsets, and changing the default bankruptcy periods.

## 6. Conclusion

Ludwig W. Erhard, former Minister of Economics for Germany in 1950, revealed his thoughts about the labor policy as such:

*"The best welfare policy is the greatest economic policy. And the labor policy is the core of the economic policy."*

According to his belief, the labor policy has an enormous impact on the economy of a certain country and the welfare of citizens as well. South Korea's government should strive to implement a good labor policy not only for economic growth but also for the well-being of its citizens.

In order to achieve these two primary goals, South Korea should take an innovative approach toward to its labor policy because the definition and landscape of the labor market have changed in the hyper-connected society. South Korea's government should capitalize on hyper-connected technology as a social and economic infrastructure by which individual workers could extend their capabilities and broaden their marketplaces and finally increase their level of expertise in their career. Fortunately, South Korea has consistently been ranked in the world's upper tier regarding technology and education level of its citizens. The government should capitalize on these valuable resources that it has already achieved in order to succeed with labor market reform.

In addition, the government should leave it entirely in the hands of the free market when it comes to hiring employees as regular or non-regular workers. Instead of intervention in economic activities of each company, the government should take care of more fundamental issues such as a new safety net for independent workers. Although independent workers could get bigger opportunities in their career through hyper-connectivity, they showed enormous concern about their future such as a lack of social insurances and pension which are common with

permanent and stable regular jobs. South Korea's government needs to fortify the safety net of non-regular workers under the changing labor market. Without a stable and credible new safety net, workers are not likely to take risks or challenges on new opportunities. The chronic barrier between regular and non-regular workers could begin to erode when the government focuses on making up the safety net loophole which matches the hyper-connected labor market.

This study suggests that hyper-connectivity could be a pivotal factor that could produce successful labor market reform, especially by breaking down the dual labor market. Of course, hyper-connectivity itself is not a panacea for South Korea's labor problem. Also, there could be several side effects related to hyper-connectivity. Moreover, this study does not argue that every worker should be an independent worker who does his or her business based on the hyper-connected platform. Robert Reich, professor of Public Policy at the University of California at Berkeley, predicted that there would be roughly four kinds of worker groups in the future: 25% creative workers, 20% manual production workers, 30% service workers, and 25% public sector workers(Reich, 2002). Stable and permanent jobs will remain in the future. However, the portion of creative workers who do not belong to organizations is likely to increase much more than that of today. Creative workers and service workers would be related to hyper-connectivity. Even the small number of creative and service workers could develop into enough momentum that can act as a catalyst for change in the labor market.

One of the fundamental problems in the labor market in South Korea is that there are only a few roads to success regarding a job. Going to a few famous universities and getting stable and permanent regular jobs such as employees of conglomerates or public officials are generally regarded as a formula for success in a career. When it comes to the labor issue, South Korea is not a diverse society and this is not suitable for the competitive global market. As the world has changed into a diverse society, we start to take a different approach toward the job and success in the career. New technology has already begun to increase the possibility of success via a different path. Knowing this, the government needs to play a greater role as a

supporter for independent workers to help them unlock their potential in their career.

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## **Appendix1.**

### **Freelancer In-depth Interview**

Interview date: \_\_\_\_/\_\_\_\_/\_\_\_\_

First name: \_\_\_\_\_ Last name: \_\_\_\_\_

Nationality: \_\_\_\_\_ ☐ Male ☐ Female Age: \_\_\_\_\_

E-mail: \_\_\_\_\_

1. What is your job title? (Specific field):

\_\_\_\_\_

2. Have you ever worked as a regular employee (full-time payroll job) of an organization? If so, have many years?

☐ Yes, \_\_\_\_\_ years ☐ No, I started my career as a freelancer

3. How long have you been working as a freelancer? \_\_\_\_\_ years

4. How many paid jobs or projects are you having as of today?

\_\_\_\_\_

5. Usually, how many hours do you work every week?

\_\_\_\_\_ hours / week

6. How many days or months total did you spend without any paid jobs or projects for the last one year? (like an unemployment situation)

\_\_\_\_\_ days or \_\_\_\_\_ months

7. Roughly, how much time do you need to find a new job or a new project?

☐ within 24 hours

☐ within a week

☐ within a month

☐ within 3 months

☐ over 3months

8. How likely can you predict your monthly income (its size and timing)?

☐ very likely

☐ somewhat likely

☐ neutral

☐ somewhat unlikely

☐ very unlikely

9. What makes you want to be a freelancer?

☐ Voluntary decision ☐ Involuntary decision

10. What is the greatest benefit working as a freelancer rather than working as a full-time payroll worker for an organization?

11. What is your biggest worry as a freelancer?

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12. Do you have in mind returning (or being) a full-time payroll job employee with a similar income if possible? Why?

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13. Roughly, what is your monthly income compared to a full-time payroll job worker who has a similar job and career experiences?

- ☐ over 50% more
- ☐ 20~30% more
- ☐ almost the same
- ☐ 20~30% less
- ☐ over 50% less

14. How satisfied are you overall with your job?

- ☐ very satisfied

- ☐ somewhat satisfied
- ☐ neutral
- ☐ somewhat dissatisfied
- ☐ very dissatisfied

15. Do you think your expertise (or skill, professionalism) in this career increases more than a full-time payroll job employee in a similar field?

- ☐ much more than a regular worker
- ☐ somewhat more than a regular worker
- ☐ the same as a regular worker
- ☐ somewhat less than a regular worker
- ☐ much less than a regular worker

16. How do you think about your social insurance benefits such as health care, unemployment insurance, disability insurance, and pension benefits compared with a regular full-time employee in a similar field?

- ☐ much more than a regular worker
- ☐ somewhat more than a regular worker
- ☐ the same as a regular worker
- ☐ somewhat less than a regular worker
- ☐ much less than a regular worker

17. How likely do you promote your expertise, knowledge, project outcomes, or intention as a job seeker through the Internet connection (e.g. individual web-site, blog, social media, web-based job matching platform such as Upwork, oDesk, Elance, Freelancer.com, TaskRabbit, Kaggle, or others)?

- ☐ very likely
- ☐ somewhat likely
- ☐ neutral
- ☐ somewhat unlikely
- ☐ very unlikely

18. How likely do you store your project outcome regarding a career in an individual web-site, blog, Social media, or other Internet based storage?

- ☐ very likely
- ☐ somewhat likely
- ☐ neutral
- ☐ somewhat unlikely
- ☐ very unlikely

19. How likely do you get a paid-job or a paid-project through the Internet connection (e.g. individual web-site, blog, Social media, web-based job matching platform such as Upwork, oDesk, Elance, Freelancer.com, TaskRabbit, and Kaggle)?



- ☐ very likely
- ☐ somewhat likely
- ☐ neutral
- ☐ somewhat unlikely
- ☐ very unlikely

20. How likely do you get a paid-job or a paid-project from abroad through the Internet connection (e.g. individual web-site, blog, Social media, web-based job matching platform such as Upwork, oDesk, Elance, Freelancer.com, TaskRabbit, Kaggle, or others)?

- ☐ very likely
- ☐ somewhat likely
- ☐ neutral
- ☐ somewhat unlikely
- ☐ very unlikely

21. How likely can you get enough information regarding a job through the Internet connection (e.g. web-site, blog, social media, web-based job matching platform such as Upwork, oDesk, Elance, Freelancer.com, TaskRabbit, Kaggle, or others)?

- ☐ very likely
- ☐ somewhat likely

- ☐ neutral
- ☐ somewhat unlikely
- ☐ very unlikely

22. How likely can you learn new skill, knowledge, and know-how regarding a job through the Internet connection (e.g. web-site, blog, social media, web-based job matching platform such as Upwork, oDesk, Elance, Freelancer.com, TaskRabbit, Kaggle, or others)?

- ☐ very likely
- ☐ somewhat likely
- ☐ neutral
- ☐ somewhat unlikely
- ☐ very unlikely

23. How likely do you get feedbacks from clients through the Internet connection (e.g. web-site, blog, social media, web-based job matching platform such as Upwork, oDesk, Elance, Freelancer.com, TaskRabbit, Kaggle, or others)?

- ☐ very likely
- ☐ somewhat likely
- ☐ neutral
- ☐ somewhat unlikely

☐ very unlikely

■ The following questions are for participants who have experience obtaining paid-jobs through the Internet connection (e.g. web-site, blog, social media, web-based job matching platform such as Upwork, oDesk, Elance, Freelancer.com, TaskRabbit, Kaggle, or others)

24. What is your favorite Internet connection tool for getting a job?

\_\_\_\_\_

25. How long have you used the Internet connection regarding your job career?

\_\_\_\_\_ years

26. Usually, how many jobs, tasks, or projects do you get a month through the Internet connection?

\_\_\_\_\_ times / month

27. What percentage of your jobs or projects is contracted through the Internet connection? \_\_\_\_\_ %

28. What percentage of your total paid-jobs comes from abroad?  
\_\_\_\_\_ %

29. What kind of changes have you experienced while using the Internet connection comparing to a time when not using the Internet connection?

29-1. Income change & why?

- ☐ highly increase
- ☐ somewhat increase
- ☐ almost the same
- ☐ somewhat decrease
- ☐ highly decrease

(reason)

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29-2. Monthly Income prediction & why?

- ☐ highly increase
- ☐ somewhat increase
- ☐ almost the same
- ☐ somewhat decrease
- ☐ highly decrease

(reason)

---

29-3. Time for getting a new job (or a project) & why?

- ☐ highly decrease
- ☐ somewhat decrease
- ☐ almost the same
- ☐ somewhat increase
- ☐ highly increase

(reason)

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29-4. Expertise of career & why?

- ☐ highly increase
- ☐ somewhat increase
- ☐ almost the same
- ☐ somewhat decrease
- ☐ highly decrease

(reason)

---

29-5. Job satisfaction & why?

- ☐ highly increase
- ☐ somewhat increase
- ☐ almost the same
- ☐ somewhat decrease
- ☐ highly decrease

(reason)

---

29-6. Competition with other workers & why?

- ☐ highly increase
- ☐ somewhat increase
- ☐ almost the same
- ☐ somewhat decrease
- ☐ highly decrease

(reason)

---

30. What do you think is the biggest change regarding your career with the use of

the Internet connection?

31. What do you think is the biggest negative impact regarding your career with the use of the Internet connection?

## **Appendix2.**

### **Expert in-depth Interview**

Q1. Do you think that digital technologies (especially, online talent platform) create new opportunities for individuals who are not employed by organizations?

Q2. Do you think that digital technologies could empower independent workers in their careers?

Q3. Do you think that digital technologies could improve overall benefits of workers who do not belong to organizations?

Q4. Do you think that digital technologies could change the way we work in the future?  
How and to what extent?

Q5. If so, what do you think is the main factor for this change?

Q6. Are there any empirical pieces of evidence or mechanisms that can explain this change?

Q7. Do you think the role of government (Federal or Local) should be changed as digital technologies have changed the way we work? How and in what way?

Q8. Do you have any idea that could solve the problem of the serious dual labor market in Korea?



## 국 문 초 록

초연결은 사람과 사람, 사람과 사물, 사물과 사물의 연결이 극대화된 상태를 의미하는 용어로, 21세기 들어 기술과 세계화라는 두 가지 큰 흐름 속에서 나타난 현상이다. 초연결이 일상의 여러 측면에서 큰 영향을 미치고 있지만, 이 논문에서는 초연결이 사람들의 일하는 방식과 노동시장의 구조를 어떻게 바꾸고 있고, 이런 변화에 대해 정부는 어떤 정책적 접근을 해야 하는지에 초점을 맞추었다. 특히, 한국 노동시장의 가장 독특하면서도 큰 문제로 거론되고 있는 노동시장 이중구조 문제를 해결하는데 어떠한 시사점을 갖는지에 집중했다.

이 논문은 커뮤니케이션 기술의 급속한 발전으로 인해 연결이 극대화되는 초연결이 첫째, 인간의 잠재된 역량을 확장시켜주고, 둘째, 대규모 조직에 속하지 않더라도 과거보다 훨씬 확대된 시장에 접근할 수 있도록 해준다는 두 가지 관점으로 접근했다. 즉, 초연결이 대규모 조직에 속하지 않은 개인이나 소규모 사업체에게 일종의 지렛대의 역할을 함으로써 과거와는 비교할 수 없는 규모로 시장에서 영향력을 확대할 수 있다는 관점이다. 연구 결과를 도출하기 위해 초연결을 활용해 국내외에서 일하고 있는 11명의 독립 노동자 (현직 프리랜서)와 전문가 9명, 모두 20명을 심층 인터뷰했다. 또 세계에서 가장 큰 프리랜서 비영리 기관이 지난 2015년 시행한 2천명 규모의 프리랜서 설문조사 결과를 활용해 인터뷰 내용을 뒷받침하는 방식을 사용하였다.

연구 결과, 전반적으로 독립노동자들은 특정 조직에 고용되지 않고서도 초연결 기술을 활용해 더 쉽게, 더 많은 일자리를 구하고 있는 것으로 나타났다. 단순히 일자리의 개수만 늘어나는 것이 아니라 개인 수준에서 활용할 수 있는 자원의 규모가 훨씬 커지면서 개개인의 업무적

역량이 확장되고 있는 것으로 나타났다. 이와 함께, 초연결을 통해 개개인이 접근할 수 있는 시장이 확대되면서 대규모 공장, 유통망 등의 인프라 시설이 없더라도 독립 노동자가 세계 시장에서 자신의 제품, 서비스, 노하우 등을 판매할 수 있는 활로가 점차 열리고 있다. 연구 결과 시장의 확대는 개개인의 전문성 향상, 소득의 증가와도 관련이 있으며 결국 개인의 직업 만족도가 높아지는 것으로 이어지는 것으로 나타났다. 다만, 인터뷰를 진행한 독립 노동자들 모두 관련된 정규직 노동자보다 현재 소득이 높음에도 불구하고 향수 수입 등 미래에 대해 불안감을 느끼는 것으로 나타났다. 특히, 과반수 이상의 응답자가 건강보험과 실업보험 등 사회보장이 허술하다고 답하는 등 변화하는 기술 환경 속에서 사회 안전망에 대한 재정비가 시급한 것으로 나타났다.

기술은 노동시장의 구조를 급격히 바꾸고 있으며, 그 안에서 일하는 노동자들의 근무조건 역시 빠르게 변화시키고 있다. 연구를 통해 드러난 결과를 보면 일자리에 대한 과거의 일반적인 기준이 조금씩 바뀌기 시작했음을 알 수 있다. 초연결로 일의 정의까지 바뀌고 있는 상황에서 정부의 일자리 정책의 방향도 달라질 필요성이 있다. 비정규직을 가급적 많이, 빨리 정규직으로 전환시켜야 한다거나, 비정규직은 무조건 보호의 대상이라는 관점으로 접근해서는 소기의 노동시장 개혁을 이루기 어려울 수 있다. 그 보다는 개인이나 소규모 사업체가 초연결이라는 일종의 사회, 경제적 인프라를 최대한 활용해서 개개인 노동자의 재능, 역량, 전문성 등 직업에서의 영향력을 극대화할 수 있도록 정부가 뒷받침을 하는 정책으로 방향을 전환하는 것이 보다 근본적인 해법이 될 수도 있다. 정규직을 확대하려는 인위적인 정책보다는 오히려 개인이나 소규모 사업체가 시장에서 보다 안정적으로 일을 할 수 있도록 새로운 형태의 사회안전망 -개인별 사회보장 계정, 공정시장 확보방안- 을 검토하는 것이 우선 순위가 돼야 한다. 국민들의

교육 수준과 IT 인프라 수준이 세계 최고인 한국의 상황에서는 더더욱 초연결을 기반으로 개개인의 역량이 확장될 수 있는 방향으로 노동시장을 개혁하는 것이 바람직하다고 보며, 이런 방향이 이어지게 되면 오랫동안 공고하게 자리잡고 있는 노동시장의 이중구조 문제 역시 자연스럽게 해소될 수 있을 것으로 보인다.

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**키워드:** 초연결, 개인 역량의 확장, 시장의 확장, 노동의 미래, 노동시장  
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